

GLOSSARY

The explanation or definitions of terms and abbreviations commonly used in the aviation community can be found in FAR, Part 1, and DOD FLIP General Planning, Chapter 2; and Aeronautical Information Manual (AIM) Pilot/Controller Glossary. No effort to duplicate these terms is intended. Where terms are used in this instruction with a different connotation or where definitions are lacking in the above-mentioned publications, the explanations of such terms are included.

A

Actual Instrument Approach. When actual instrument conditions are encountered below 1,000 feet above the airport/flight deck elevation during an instrument approach.

Actual Instrument Conditions. Conditions external to the aircraft in flight that do not permit visual reference to the horizon.

Aerobatic Flight Maneuvers. An intentional maneuver involving an abrupt change in aircraft attitude, intentionally performed spins, or other maneuvers requiring pitch/dive angles greater than 45°, bank angles greater than 60°, or accelerations greater than 2gs. A break maneuver that conforms to the model NATOPS manual is not considered to be aerobatic flight.

Aeromedical Dual Designator. An aeronautically designated Medical Department officer (i.e., flight surgeon, aerospace physiologist, aerospace experimental psychologist, or aviation optometrist) with the Additional Qualification Designator (AQD) of either 6AC (Med Dept & NFO) or 6AE (Med Dept & Pilot).

Aeromedical Officer. An aeronautically designated Medical Department officer (i.e., flight surgeon, aerospace physiologist, aerospace experimental psychologist, or aerospace optometrist), or officer student in a course of instruction leading to such designation.

Aeronautically Designated Personnel. A collective term that applies to all Naval Aviators, Naval Flight Officers, Naval Aerial Observers (USMC),

Naval Flight Surgeons, Naval Aerospace Physiologists, Naval Aerospace Experimental Psychologists, Aviation Operations Officers (AVOPS), Aviation Warfare Systems Operator (AW rating), personnel assigned by the Chief of Naval Personnel under a distribution Naval Enlisted Classification (NEC) of 82XX and 94XX, and USMC-enlisted crewmembers. Enlisted noncrewmembers are not considered aeronautically designated.

Aircraft Class. A broad classification as to the general mission purpose of an aircraft design (e.g., attack, fighter, helicopter, patrol, transport, vertical takeoff and landing and unmanned aerial vehicles).

Aircraft Commander Time. The individual flight time during which an individual, designated as a qualified aircraft commander in the aircraft model being flown, is serving as pilot in command. Aircraft commander time is a measure of command experience rather than of pilot experience.

Aircraft Model. The basic mission symbol and design number (i.e., P-3, S-3, F-14, and H-60).

Aircraft Series. The specific version of aircraft within the same model (e.g., AV-8B; H-46D or E; F/A-18D or E/F).

Aircraft Type. The broadest classification of aircraft as to physical characteristics (i.e., fixed-wing, rotary-wing or tilt-rotor).

Aircrew. A collective term that applies to all categories of personnel in a flight status either as crew or noncrewmember. Aircrew are military personnel on competent flight orders or civilian personnel whose duties require frequent and regular participation in aerial flights to perform inflight functions such as installation, maintenance, evaluation of airborne technical equipment (maintenance skins), communication specialists, photo specialists, etc.

B

Bolter. An attempted arrested landing on a carrier in which some portion of the aircraft, such as the landing gear or hook, touches the deck but the arresting gear is not engaged and the aircraft continues in flight.

C

Career Crewmember (also known as Career Enlisted Flyer). A member of the Navy enlisted aviation community rating (AD, AE, AM, AMH, AME, AMS, AO, AT, AV, AW, PR, IT (TACAMO only), or AZ (TAR only)) holding a 78XX, 82XX, or 94XX NEC; or is in a formal training pipeline leading to the award of those NECs, and is detailed by PERS-404E or NRPC-417. Career Enlisted Flyers are crewmembers who are primarily detailed throughout their career into flying billets. Career Enlisted Flyers receive either continuous or conditional Career Enlisted Flyer Incentive Pay (CEFIP) and not Hazardous Duty Incentive Pay (HDIP) for aerial flight.

Chemical, Biological Radiological, or Nuclear Defense (CBRND). Defensive measures taken against the effects of a chemical, biological, or a nuclear weapon attack.

Computer Aided NAVFLIRS Data Entry (CANDE). CANDE is a CNO/Commander, Naval Air Systems Command (COMNAVAIRSYSCOM) — authorized automated program designed to provide support to squadron personnel for accurate completion of the NAVFLIRS form (OPNAV 3710/4). It allows squadron personnel to input pre-flight and postflight data into the program that will generate a data diskette for processing at the local data service facility (DSF) and hard-copy facsimiles for the master flight file and the maintenance analyst.

Civilian Non-DOD Government Employee. Individual could be with other Federal Government agency, state, county, or local government, etc., or an individual not with any government agency but whose activities benefit the general public at large.

Firefighters and in-flight medical services are examples.

Combatant Commander. A commander of one of the unified or specified combatant commands established by the President.

Competent Authority. An official bearing the title of commanding officer or reporting senior higher in the chain of command.

Control (Radar)

- a. Advisory. The tactical control of aircraft by a designated control unit in which the pilot receives directions and recommendations. Aircraft commanders are not relieved of responsibility for their own safety and navigation.
- b. Close. The tactical control of aircraft by a designated control unit, whereby the pilot receives orders affecting aircraft movements. The pilot will not deviate from controller instructions unless given permission or unless unusual circumstances require immediate action for the safety of the flight. In either case, the pilot will inform the controller of the action taken. This type of control requires two-way radio communication and radar contact. The controller is responsible for the safe separation of the aircraft, and the pilot must be informed whenever the aircraft is not held on the radarscope for periods in excess of 1 minute or five sweeps of the radar and, as a result, is being dead reckoned. The ultimate safety of the aircraft is the responsibility of the pilot.
- c. Positive. The tactical control of aircraft by a designated control unit, whereby the pilot receives orders affecting aircraft movements that transfer responsibility for the safe navigation of the aircraft to the unit issuing such orders. The ultimate safety of the aircraft is the responsibility of the pilot.

Controlling Custodian. The command exercising administrative control of assignment, employment, and logistic support of aircraft. Controlling custodians are identified in OPNAVINST 5442.2.

Conversion Mode. Flight operations with the nacelles set between 74° and 5° are considered to be in CONV mode. (Constant nacelle settings between 5° and 1° are not selectable by the pilot.)

Crew Resource Management (CRM). The use of specifically defined behavioral skills as an integral part of every flight to improve mission effectiveness by minimizing crew preventable errors, maximizing crew coordination, and optimizing risk management.

Cross-Country Flight. A flight that either does not remain in the local flying area or remains in the local flying area and terminates at a facility other than an active military facility.

D

Designations. A designation is a one-time occurrence and remains in effect until removed for cause. Commanders shall issue a designation letter to the individual upon the occasion of his/her original designation with appropriate copies for inclusion in his/her NATOPS qualification jacket.

DIFCREW. Duty for enlisted personnel in a flying status involving operational or training flights.

DIFDEN. Duty in a flying status for an officer not involving flying.

DIFOPS. Duty in a flying status for an officer involving operational or training flights.

DIFTEM (USN). Duty in a temporary flying status performing special mission duties as a non-crew member. Enlisted personnel are so ordered in accordance with BUPERINST 1326.4 (series).

Direct Station-to-Station Communications. A means of passing flight progress information between airfields. Communications should be established by one of the following methods:

- a. Voice landline
- b. Aeronautical Information System (AIS).

E

Enlisted Crewmember (USMC). Enlisted personnel on competent orders to perform duty involving frequent and regular participation in aerial flight as a crewmember.

Enlisted Noncrewmember on Flight Orders (USMC). Enlisted personnel on competent orders to perform duty involving frequent and regular participation in aerial flight who are not performing duties related to the actual operation of the aircraft or associated equipment in the aircraft (i.e., maintenance personnel who perform inflight functions such as installation or troubleshooting of airborne technical equipment (maintenance skins) and VIP support, photo specialists, etc.).

F

Flight

- a. For operational purposes, a flight is one or more aircraft proceeding on a common mission.
- b. For recording and reporting purposes, a flight begins when the aircraft first moves forward on its takeoff run or takes off vertically from rest at any point of support and ends after airborne flight when the aircraft is on the surface and either:
 - (1) The engines are stopped or the aircraft has been on the surface for 5 minutes, whichever comes first
 - (2) A change is made in the pilot in command.
- c. For helicopters, a flight begins when the aircraft lifts from a rest point or commences ground taxi and ends after airborne flight when the rotors are disengaged or the aircraft has been stationary for 5 minutes with rotors engaged.

Note

Flight time on repetitive evolutions such as field carrier landing practice (FCLP), passenger/cargo stops, and carrier qualifications shall be logged from the time the aircraft takes off until the aircraft has been on

the surface for 5 minutes after each evolution flown (i.e., three sorties of 55 minutes actual air time interspersed with two 20-minute ground periods for refueling or passenger/cargo transfer will be logged as 3.0 hours of flight time).

Flight Clearance. A flight clearance provides temporary flight operating limits for an aviation system operating in a nonstandard configuration or to a nonstandard envelope, pending issuance of the technical directive or change to the NATOPS, NATIP, or tactical manuals. A flight clearance is a temporary airworthiness approval from COMNAVAIRSYSCOM.

Flight Crew. Personnel whose presence is required on board a manned aircraft or at a control station for UAVs to perform crew functions in support of the assigned mission (e.g., pilot, copilot, navigator, flight engineer, internal pilot, crew chief, air observer, special crew, trainee, etc.).

Flight Support Personnel. Personnel immediately involved in the maintenance, fueling, towing/moving, start-up, taxi, or launch and recovery of aircraft including, but not limited to, taxi directors, catapult and arresting gear crew, final checkers, landing signal enlisted (LSEs), aircraft maintenance personnel and aircraft move crews and directors.

Flight Time. The elapsed time computed in accordance with the definition of flight. Flight time is logged in hours and tenths of hours and is creditable to the aircraft, personnel aboard, and equipment.

Formation Flight. A flight of more than one aircraft operating by prior arrangement as a single aircraft with regard to altitude, navigation, and position reporting, and where separation between aircraft within the flight rests with the pilots in that flight.

H

Hazard. A condition with the potential to cause personal injury or death, property damage, or mission degradation.

I

Individual Flight Time. The total pilot time and special crew time creditable to an individual.

Instructor. A naval aviator, naval flight officer, or naval aircrewman designated in writing by competent authority as a flight instructor, NATOPS evaluator, or NATOPS instructor in the aircraft model being flown.

Instructor Time. Individual flight time during which an instructor is required to instruct or evaluate other aeronautically designated personnel or students undergoing a formal flight syllabus.

Instrument Meteorological Conditions.

Meteorological conditions expressed in terms of visibility, distance from clouds, and ceiling less than the minimums specified for visual meteorological conditions. IMC conditions exist anytime a visible horizon is not distinguishable.

Instrument Time. The portion of pilot time in either day or night under actual or simulated instrument conditions.

- a. Actual instrument time will be logged by both pilots in a dual/multipiloted aircraft during flight in actual instrument conditions.
- b. Simulated instrument time shall be logged only by the pilot actually manipulating the controls.

Note

NFOs and student NFOs may report actual instrument time if they fly in an aircraft in which they can monitor the pilot instruments and recommend information to the pilot during actual instrument conditions.

J

Joint Service Battlestaff Personnel Embarked on Naval Aircraft. Personnel of all services serving as Battlestaff crewmembers on board Navy E-6 aircraft conducting airborne strategic communications.

L

Landing. A return to the surface; landings include touch and go (providing the landing gear touches the surface), bolter, forced, or crash.

Note

Terms of control terminology such as immediately, possible, and practicable refer to the degree of urgency intended in the message:

- a. Land immediately — Self-explanatory.
- b. Land as soon as possible — Land at the first site at which a safe landing can be made.
- c. Land as soon as practicable — Extended flight is not recommended. The landing site and duration of flight is at the discretion of the pilot in command.

Local Flight. A flight that remains within the local flying area and terminates at either the same facility or another military facility with which the originating station has direct station-to-station communications.

Local Flying Area. That area in the vicinity of an air installation in which locally-based aircraft can operate during an average/typical sorties flight time. The local flying area shall not exceed 350 miles from an air installation and be designated as such in the Air Operations Manual by the Commanding Officer. In so far as practicable, local flying areas shall be bounded by prominent terrain features and/or air navigation aid radials/distances.

M

Mile. All distances referred to in this instruction are nautical miles unless otherwise specified.

Mission Commander Time. Flight time during which an individual, designated as a qualified mission commander in the aircraft model being flown, is serving as the mission commander. Mission commander time is a measure of command experience rather than flight experience.

Multipiloted Aircraft. Any aircraft having two sets of flight controls and instruments and operated by two pilots, both of who meet the requirements of the NATOPS manual for that model aircraft.

N

Naval Aircraft. For the purposes of this instruction, those aircraft accepted into the naval aircraft inventory reporting system, pre-accepted aircraft, and public use aircraft operated exclusively by or for the Navy.

Naval Aircrewman. A designation for enlisted personnel who have met the requirements for qualification and have been so certified in accordance with paragraph 12.9 of this instruction.

Naval Aviation Shore Facility. A facility at which an active airfield exists and is either owned, operated, or controlled by the Navy or Marine Corps.

Night Time. The portion of pilot time during darkness (i.e., between the official time of sunset and sunrise (on the surface below the aircraft in flight), regardless of whether visual or instrument conditions exist).

O

Officer in Tactical Command. The senior officer present eligible to assume command, or the officer to whom he has delegated tactical command.

Official Business. The necessity to contact personnel, units, or organizations for the purpose of conducting transactions in the service of and in the interest of the United States Government. This definition does not authorize the use of official business only airfields, their services, or other items attendant to itinerant operations when making en route stops while proceeding to an airfield at which official business is to be conducted. Official business only restrictions do not preclude the use of the facility as an alternate during instrument flight rule (IFR) conditions.

Operational Flying. (See paragraph 11.2 for definition and application.)

Operational Necessity. A mission associated with war or peacetime operations in which the consequences of an action justify accepting the risk of loss of aircraft and crew.

Operational Risk Management. The process of dealing with the risk associated with military operations, which include risk assessment, risk decision making and implementation of effective risk controls.

Orientation Flight. A continuous-flight in DOD aircraft performed within the local flying area and terminating at the point of origin intended to further the understanding of particular programs concerning the roles and missions of the Department of Defense.

P

Passenger. An individual who is not part of the aircrew traveling in an aircraft designed or normally configured for passenger (nonaircrew) carrying capability on a point-to-point flight.

Pathfinder. An aircraft whose primary mission is to assist tactical aircraft with communication or navigation of flights over regions where normal tactical aircraft navigation/ communication equipment is unusable.

Pilot in Command. The pilot assigned responsibility for safe and orderly conduct of the flight.

Pilot Time. The flight time credited to a designated aviator, student naval aviator, student/designated naval flight surgeon, student/designated aerospace physiologist, or student/designated aerospace experimental psychologist assigned to duty involving flying. Pilot time includes all time credited as first pilot and copilot. Pilot time is intended to be a

record of active participation in the control of an aircraft. Pilot time will be credited to the individual actually earning it regardless of rank, billet, age, or level of experience.

- a. **First Pilot Time.** The portion of pilot time during which an individual is positioned with access to the flight controls and is exercising principal active control of the aircraft.
- b. **Copilot Time.** The portion of pilot time while assisting the pilot exercising principal active control of a multipiloted aircraft during which the copilot is positioned with access to and is immediately ready to operate the flight controls; or, in those aircraft with only one set of flight controls, that portion of flight time while instructing the pilot who is exercising principal active control when the designated instructor is positioned so that pilot and aircraft instruments can be observed. Aeronautically designated personnel may log CPT while performing copilot duties as required by the aircraft mission.

Pilot Under Instruction. A designated aviator under instruction.

Pre-accepted Aircraft. Those aircraft under development or in production for the Navy which have not yet been accepted into the naval aircraft inventory via DD 250.

Project Specialist. A non-aeronautically designated individual embarked in a government aircraft not equipped with ejection seats for the purpose of operating aircraft systems, operating specially designed equipment, or observing aircraft or crew performance when required in connection with assigned duties or contractual responsibilities which will require flight on a regular basis for mission accomplishment which extend beyond a 90-day flying period. Project specialists are not responsible for normal aircrew duties.

Public Use Aircraft. For the purposes of this instruction, civil aircraft operated exclusively by or for the government under contract for greater than 90 days.

Q

Qualified in Model. A designation that indicates the minimum requirements for qualification in a specific crew position, as set forth in the appropriate NATOPS manual, have been attained. Such designations are a one-time occurrence (per unit/command tour) and remain in effect until removed for cause. Annual NATOPS evaluations should not be confused with or combined with these designations. If specific aircraft model NATOPS guidance is lacking, an individual shall be considered qualified in model for specific crew position when so designated by the reporting custodian.

R

Reporting Custodian. An organizational unit of the lowest echelon of command accepting responsibility (involving accountability to CNO) for aircraft as designated either by CNO or by the controlling custodian of the aircraft.

Risk. An expression of possible loss in terms of severity and probability.

Risk Assessment. The process of detecting hazards and assessing associated risks.

S

Selected Passengers. A non-aeronautically designated individual embarked in a government aircraft equipped with ejection seats. Selected passengers are not responsible for normal aircrew duties and shall have flying requirements which require flight on a regular basis for mission accomplishment which extend beyond a 90-day flying period. This category is not appropriate for those completing orientation flights or for midshipmen.

Simulated Instrument Approach. An instrument approach flown under simulated instrument conditions.

Simulated Instrument Conditions. Conditions external to the aircraft in flight are visual meteorological conditions (VMC), but pilot vision is limited primarily to the interior of the aircraft.

Single-Piloted Aircraft. Any aircraft that has only one set of flight controls or a tandem cockpit, or any aircraft that has two sets of flight controls and instruments and is being operated by only one pilot who meets the requirements of the NATOPS manual for that model aircraft.

Special Crew Time. The portion of flight time accrued while not acting as first pilot or copilot, but otherwise serving as a member of the authorized crew complement of an aircraft or as a student in flight training.

Special Operations Personnel. Personnel that are required to conduct special operations such as high-altitude parachuting from military aircraft (SEALS, ANGLICO, RECON, physiology safety observers, etc.).

Stereo Route. Routinely used route of flight established by users and ARTCC identified by a coded name. These routes simplify flight plan handling and communications.

Student Naval Aviator (Student Pilot). An individual undergoing training who is not designated as a naval aviator.

T

Tilt-rotor. Aircraft type capable of rotor-borne and wing-borne flight (e.g., MV-22).

Trip. A consecutive series of flights by the same aircraft with the same general purpose of flight (with regard to the aircraft only), pilot in command, and transaction code (i.e., ship operations or shore operations) from point of original departure to destination.

U

Unmanned Aerial Vehicle. A remotely piloted aircraft designed for purposes other than as a target (e.g., reconnaissance, surveillance, gunfire support, etc.). UAVs are flown by referencing instruments or visually.

V

Very Important Persons. VIPs are defined as flag officers, DOD officials equal to or senior to flag officers, high-profile public figures, elected members of Congress, etc.

Visual Meteorological Conditions. Meteorological conditions expressed in terms of visibility, cloud distance, and ceiling that are equal to or better than specified minimums. Basic weather conditions prescribed for flight under visual flight rules (VFR). (Refer to Chapter 5.)

VOD. For the purposes of this instruction, all helicopter and tilt-rotor aircraft that have the capability to deliver passengers or cargo.